

3. (Twice Amended) A slidable member as claimed in Claim 15, wherein the surface section of said hard carbon-based film contains at least one of nitrogen and oxygen in an amount ranging from 4 to 20 at%.

4. (Twice Amended) A slidable member as claimed in Claim 15, wherein said hard carbon-based film has a surface roughness lower than  $0.1 \mu\text{m}$ .

5. (Twice Amended) A slidable member as claimed in Claim 15, wherein said hard carbon-based film has a hardness HV higher than 1000.

B1  
Cont  
6. (Twice Amended) A slidable member as claimed in Claim 15, wherein said hard carbon-based film has a thickness ranging from 1 to  $10 \mu\text{m}$ , wherein said hard carbon-based film has a coefficient of friction of not higher than 0.07 in a condition where said hard carbon-based film is dipped in a lubricating oil.

7. (Twice Amended) A slidable member as claimed in Claim 15, wherein said substrate is formed of a material selected from the group consisting of silicon nitride and steel.

SubC1  
~~8. (Twice Amended) A slidable member as claimed in Claim 15, wherein said hard carbon-based film is formed of a material selected from the group consisting of diamond polycrystal, amorphous carbon, and diamond like carbon.~~

B3  
SubC2  
~~11. (Twice Amended) A slidable member as claimed in Claim 15, wherein said hard carbon-based film is formed by one of a carbon ion beam process, a thermal chemical vapor deposition process, an ion plating process, and a sputtering process.~~

Please add the following new claims:

B3  
SubC3  
15. (New) A slidable member in combination with lubricating oil in contact with said slidable member, said slidable member comprising:  
a substrate; and  
a hard carbon-based film coated on a surface of said substrate, said hard carbon-based film having a surface section which contains at least one of nitrogen and oxygen in an amount ranging from 0.5 to 30 at%.

16. (New) A system comprising:

a slidable member including a substrate, and a hard carbon-based film coated on a surface of said substrate, said hard carbon-based film having a surface section which contains at least one of nitrogen and oxygen in an amount ranging from 0.5 to 30 at%; and

lubricating oil in contact with said slidable member.

17. (New) A valve operating system comprising:

a valve lifter connected to a valve, driven by a cam;

an adjusting shim disposed on said valve lifter and located between said valve lifter and the cam, said adjusting shim including a substrate, and a hard carbon-based film coated on a surface of said substrate, the hard carbon-based film having a surface section which contains at least one of nitrogen and oxygen in an amount ranging from 0.5 to 30 at%, the surface section of the hard carbon-based film being in slidable contact with the cam; and

lubricating oil present between the surface section of the hard carbon-based film of said adjusting shim and the cam.

18. (New) A slidable member used in contact with lubricating oil, comprising:  
a substrate; and

a hard carbon-based film coated on a surface of said substrate, said hard carbon-based film having a surface section which contains at least one of nitrogen and oxygen in an amount ranging from 0.5 to 30 at% and hydrogen in an amount of not more than 10 at%.

19. (New) A slidable member as claimed in Claim 15, wherein the surface section of said hard carbon-based film contains hydrogen in an amount of not more than 10 at%.

20. (New) A system as claimed in Claim 16, wherein the surface section of said hard carbon-based film contains hydrogen in an amount of not more than 10 at%.